

SURGERY.

UNDER THE CHARGE OF

J. WILLIAM WHITE, M.D.,

PROFESSOR OF CLINICAL SURGERY IN THE UNIVERSITY OF PENNSYLVANIA; SURGEON TO THE UNIVERSITY,
PHILADELPHIA, AND GERMAN HOSPITALS.

ETIOLOGY OF SUPPURATION.

To this much-disputed question NATHAN (*Archiv für klin. Chirurg.*, Bd. xxxvii. S. 875-879) makes a contribution of great interest in view of the fact that Grawitz and De Bary assert that ammonia, silver nitrate, and turpentine injected subcutaneously into the tissues of dogs produce a suppuration in which no germs can be found.

Nathan used dogs in his experiments; the point of injection was shaved and carefully disinfected by corrosive sublimate solution, 1:1000; the substance used was, after careful sterilization, injected by means of a needle thoroughly purified by heat. During the whole experiment the field of operation was irrigated with sublimate solution. It was found that abscesses did at times, but not invariably, appear as a result of these injections. Plate cultures invariably showed that these abscesses contained microorganisms, though both cover-glass preparations and test-tube cultures failed to demonstrate them. The development of microorganisms was explained by the theory that by constant licking the dogs infected the needle puncture.

TREPHINING FOR BRAIN TUMOR.

The following case is reported by FISCHER (*Wien. medicin. Presse*, No. 25, 1889). Patient, æt. thirty-seven, suffered in 1887 from the first symptoms of brain tumor. There was an epileptic attack with subsequent monobrachial paresis and disturbance of sensibility. On examination some aphasia was detected, together with sluggishness of the left pupil. The patient was trephined, but no trace of cerebral tumor could be found; nevertheless, there was great improvement in all the symptoms, which was, however, only temporary. Five months later, at the earnest solicitation of the patient, he was again trephined and a tumor was found involving the ascending frontal convolution. This was shelled out by the finger of the operator, and the cavity was tamponed with iodoform. There was prompt healing. Two months later the symptoms of cephalalgia and paresis returned, and the patient died in coma. The recidivity had taken place not from the brain substance, but from a portion of the growth which had not been removed from the dura. The tumor was a round-celled sarcoma.

In view of the uncertainty of diagnosis and the relief which in certain cases operation can afford to the patient, Horsley advises, in all instances, an exploratory opening of the cranium. In Jacksonian epilepsy this is also to be commended, while even in idiopathic epilepsy the segment of the skull

from which the trouble seems to originate has been removed with a subsequent amelioration of all symptoms.

CERVICAL AËROCELE.

PETIT (*Revue de Chirurgie*, No. 6, 1889) considers briefly, but very thoroughly, the etiology, symptomatology, and treatment of what are variously called aëroceles, bronchoceles, laryngoceles, and tracheoceles. Some forty-two cases are reported, and the author decidedly takes issue with Gayet's dictum, "The surgical treatment is worse than the disease." In regard to prognosis, these affections are arranged as follows:

1. Aëroceles caused suddenly by effort, as in case of a cough or during labor. In these cases, since the cause is mostly temporary, the disease may readily effect its own cure.

2. Aëroceles produced suddenly by great and repeated muscular effort, as in case of chronic chest affections accompanied by violent cough. In these cases there is no tendency to cure. Compression may arrest but cannot cure the affection.

3. Aëroceles due to ulceration or lesion of the air-passages. Some are cured when the original lesion is repaired, others have little tendency toward recovery.

In certain cases the prognosis of aërocele may be exceedingly grave, quite independently of the causative lesion or defect. There are, in these cases, sudden and repeated attacks of dyspnœa, due probably to pressure upon the recurrent laryngeal nerve.

The treatment consists in remedying the primitive and causative defect, in combating the pressure effects of the tumor, preventing its growth, endeavoring to cure it, and providing against its recurrence.

As far as operative procedure is concerned, an incision should first be made which gives sufficient room for thorough exploration; the tumor should then be opened and the orifice of communication found. This should be carefully closed, its surfaces having been first freshened, the walls of the cavity should be dissected out, and the whole wound should be tightly approximated by deep and superficial sutures.

Petit's conclusions are:

1. The predisposing causes for gaseous tumors of the neck are the anatomy of the parts, anomalies of this region, pathological conditions, and traumas.

2. The exciting cause is usually muscular action.

3. These tumors exist either as a hernia of the mucous membrane, or simply as a space or cavity in the cellular tissue of the neck. They are, consequently, either without lining walls, properly speaking, or are circumscribed by a mucous membrane, or a structure resembling that which circumscribes cysts.

4. Clinically regarded, these tumors either develop immediately to full size, or after sudden appearance slowly enlarge, or grow steadily from their first appearance.

5. These tumors can be cured by compression and the administration of narcotics, or, that failing, by operation.